

Amateur Computer Group of New Jersey NEWS

Volume 38, Number 12

December 2013

ACGNJ Announcements

Elections Are Here!

This month's Main Meeting (Friday, December 6, 8:00 PM) is also our Annual Business Meeting and Elections. Ideally, we should have a complete slate of candidates to publish in this month's newsletter; but as has happened before, we are still looking for volunteers to fill open positions. So please think about running for office. More than anything else, our club needs *YOU!*

Candidates:

President: Michael Redlich

Vice-President: Wendy Bell

Secretary: Brenda Bell

Treasurer: Malthi Masurekar

Directors (Two year term, through 2015):

Gregg McCarthy

John Raff

Frank Warren

(Open)

Director (One year term, through 2014):

(Open)

Nominations will be accepted from the floor up until the election. So let's see if we can fill those slots!

Window Pains Meeting

Friday, December 20th, 8:00 PM to 10:00 PM

Scheduled: Our *Holiday Party!*



<http://www.acgnj.org>

Founded 1975

ACGNJ Meetings

For the very latest news on ACGNJ meetings, please visit the ACGNJ Website (www.acgnj.org).

Lunics (Linux/UNIX): Monday, December 2, 8 PM
Andreas Meyer (lunics (at) acgnj.org)

Board of Directors Meeting: December 3, 7:00 PM
Mike Redlich (president (at) acgnj.org)

Main Meeting: Friday, December 6. 8:00 PM
Mike Redlich (president (at) acgnj.org)

Layman's Forum: Monday, December 9, 8:00 PM
Matt Skoda (som359 (at) gmail.com)

Java: Tuesday, December 10, 7:30 PM
Mike Redlich (mike (at) redlich.net)

Mobile Devices: Wednesday, December 11, 7:30 PM
Brenda Bell (mobdevsig (at) acgnj.org)

Investing: Thursday, December 12, 8:00 PM
Jim Cooper (jim (at) thecoopers.org).


NJ Gamers: Friday, December 13, 6:00 PM
Gregg McCarthy (greggmajestic (at) gmail.com)

Web Browser: Monday, December 16, 7:30 PM
David McRitchie (firefox (at) acgnj.org)

C/C++: Tuesday, December 17, 7:30 PM
Bruce Arnold (barnold (at) ieee.org)

Window Pains: Friday, December 20, 8:00 PM
John Raff (john (at) jraff.com)

Board of Directors Meeting: ~~December 31, 7:00 PM~~
MOVED to Friday, January 3, 7:00 PM.
(Due to the New Year's Holiday).

All meetings, unless otherwise noted, are at the Scotch Plains Rescue Squad, 1916 Bartle Ave, Scotch Plains, New Jersey. Directions and map on back page. 

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Officers, Directors and Leaders

President	Mike Redlich	(908) 246-0410	Director Emeritus	Sol Libes	(609) 520-9024
Vice President	Wendy Bell		Through 2013	Gregg McCarthy	
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Secretary	Brenda Bell			Frank Warren	(908) 756-1681
Past President	Evan Williams	(908) 359-8070		(Open)	
			Through 2014	Bob Hawes	
				David McRitchie	
				Michael Reagan	
				(Open)	
Special Interest Groups					
C Languages	Bruce Arnold	(908) 735-7898			
Genealogy	Frank Warren	(908) 756-1681			
Hardware	Mike Reagan		Standing Committees		
Investing	Jim Cooper		APCUG Rep.	Frank Warren	(908) 756-1681
Java	Michael Redlich	(908) 246-0410	Facilities	John Raff	(973) 533-0664
Layman's Forum	Matthew Skoda	(908) 359-8842	Financial	Evan Williams	(908) 359-8070
LUNICS	Andreas Meyer		Historian	Lenny Thomas	
Mobile Devices	Brenda Bell		Membership	Bob Hawes	
NJ Gamers	Gregg McCarthy		Newsletter	Bob Hawes	
Web Browser	David McRitchie		Publicity	Gregg McCarthy	
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Submissions: Articles, reviews, cartoons, illustrations. Most common formats are acceptable. Graphics embedded in the document must also be sent as separate files. E-mail submissions to newsletter@acgnj.org preferred. **Always confirm.** Date review and include name of word processor used, your name, address and phone and name, address and phone of manufacturer, if available.

Tips for reviewers: Why does anyone need it? Why did you like it or hate it? Ease (or difficulty) of installation, learning and use. Would you pay for it?

Advertising: Non-commercial announcements from members are free. Commercial ads 15 cents per word, \$5 minimum. Camera ready display ads: Full page (7 x 10 inches) \$150, two-thirds page (4.5 x 10) \$115, half-page \$85, one-third \$57, quarter \$50, eighth \$30. Discount 10% on 3 or more consecutive insertions. Enclose payment.

Publication Exchange: Other computer user groups are invited to send a subscription to ACGNJ at the address below. We will respond in kind.

Address Changes should be e-mailed to membership@acgnj.org or sent to ACGNJ at the address below.

Membership: Regular (now includes *all* family members who reside at the same address): 1 year \$25, 2 years \$40, 3 years \$55. Student: 1 year \$20. Senior Citizen (over 65): 1 year \$20, 3 years \$45. Send name, address and payment to ACGNJ, PO Box 135, Scotch Plains NJ 07076.

Typographic Note: This ACGNJ News was produced using Scribus 1.3.3.13. Font families used are Times New Roman (TT) for body text, Arial (TT) for headlines.

E-Mail Addresses

Here are the e-mail addresses of ACGNJ Officers, Directors and SIG Leaders (and the Newsletter Editor). This list is also at <http://www.acgnj.org/officers.html>.

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ACGNJ Investment Meeting SUMMARY (November 2013)

Philip Lees, ACGNJ

We had another really good meeting on Thursday, 11/14/2013. We had **17** attendees, which was a very nice attendance. It would be great to have that type of attendance on a consistent basis. There was a **lot** of constructive interaction on the topics discussed, which is fantastic - 100% encouraged and 100% welcomed!

Jim Cooper started with a presentation and discussion on the "DOJI GAP-UP" system, which was made popular by Stephen Bigalow of the Candlestick Forum. Jim discussed the system, its setup (and trigger), (tight) stops and (potential) targets (exits). Furthermore, for illustration purposes, Jim discussed some prior doji gap-up triggers and their performances were analyzed and discussed. One stock discussed was "MU".

Larry Yu did a follow-up presentation on his portfolio-management of option trades to generate income, which he has been using and testing over the summer. It has produced **very** impressive trading results with a ~25% month-to-month return on risk,

which was actually a ~7k-10k monthly "income" on the trades. Once again, for full disclosure, although Larry does trade his real money in another account, this portfolio test was conducted in a paper-money account and the results were **very** impressive : Risking about 25k per month and generating 7k-10k monthly. It was a great follow-up presentation that everybody enjoyed.

We had the pizza break between 9:00-9:30.

Jim opened up our new "From the Floor" segment, which is essentially an extension to the popular "Stock Picks" segment, when things are specifically opened up to answer everybody's questions. Many stocks and technical trading questions followed. One technical indicator that generated a lot of interest and discussion was the DynaRange indicator on Jim's charts.

Thanks to all of the attendees. Please attend the meetings, everybody learns from them. We hope to see you at December's meeting, **12/12/2013**.

Thank you, Philip Lees. ☐

ACGNJ Mini-Reports

C/C++ SIG Report (October 2013)

The meeting was held at its designated time on Oct. 15, 2013. (Third Tuesday). There were 4 members in attendance.

After "Random Access" we discussed the following topics:

1. Trends: Microsoft Visual Studio Products.
2. C++ Programming Language: A new book by Bjarne Stroustrup.
3. Demo: Microsoft latest compiler: "Visual Studio Express 2013 for Windows Desktop".

Bruce Arnold ☐

Main Meeting Report (November 2013)

Our November Main Meeting was held on Friday, November 1, 2013, starting at 8:00pm. 14 persons attended. Our own Barry Burd presented "Developing Apps for Google Glass."

Barry demonstrated the use of Google Glass, and all attendees had a chance to try the device. In addition, Barry demonstrated the creation of simple apps, including the use of the Glass-specific Mirror API and the more general Android SDK for Glass.

Thanks to Barry and all who attended.

Mike Redlich ☐

Window Pains Report (November 2013)

Our November Window Pains meeting was held on Friday, November 15, 2013, starting at 8:00pm. 6 persons attended.

ACGNJ's Brenda Bell presented "Internet Sports

TV". Brenda had some slides with lots of local and foreign sport sites listed, but few were available at the club site.

Thanks to Brenda and all who attended. ☐

Year End Review

Bob Hawes, ACGNJ

This article actually covers the *two* year period after I took over as Editor of this newsletter. Further below, I'll have something to say about my performance as an Editor; but here at the beginning, it's more about my performance as a writer. Speaking of writers: One of my favorite authors was the late, great Isaac Asimov. In October of 1969, he published his one hundredth book, an anthology called *Opus 100*. Since the first piece of professional writing that he sold was published in March of 1939, *Opus 100* covered just over thirty years of his writing career. (By the time he passed away in 1992, he'd written over **500** books. The man was *prolific*). Anyway, if he could keep track of the number of books he wrote, why couldn't I keep a running total of the articles I've written for this newsletter? So I did. Below, I've "counted down" (or do I mean "counted *up*"?) my articles for the last two years, including *brief* content descriptions where necessary.

I've had articles published in this newsletter since May of 2005. By December of 2011, my total stood

at 85. (Don't bother counting the months. They *won't* add up, because several times, I had *more* than one article in a single issue). When I first took over as full time Editor, I had quite a lot to say. So I wound up writing *five* of the seven articles in our January 2012 issue. (Though I only gave myself "author" credit for *three* of them). *Introductory Editorial* on page 3 was number 86, *Our 2011 Holiday Party* (which started at the bottom of page 3) was number 87, and *Back Me Up, Cloney* on page 6 (about the Linux drive imaging program Clonezilla) was number 88. The two I *didn't* count were *Annual Business Meeting Report* on page 1 (because it was "more edited than authored"), and *Special Computer Security Newsletter Still Available* on the bottom of page 5 (because, at only 45 words, it was just "too small").

After that, I tried to limit myself to one article a month. So *Further Adventures In Desktop Publishing* on page 3 of our February 2012 issue (about my past desktop publishing experiences, and

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my future plans for this newsletter) was number 89, *Back Us Up, Mister Tux* on page 3 of our March 2012 issue (about the Linux backup program KBackup) was number 90, *Publish and Perish* on page 3 of our April 2012 issue (describing, among other things, the construction of our March 2012 newsletter, using Scribus, my fun, fabulous, and *free* Desktop Publisher) was number 91, *Back Me Up, Sweetie* on page 3 of our May 2012 issue (about the Linux program Simple Backup Suite) was number 92; and *A Skeleton In My Closet (Part 1 of 2)* on page 3 of our June 2012 issue (describing, among other things, newsletter construction, "working" directories, and "skeleton" files) was number 93. (I *did* have a second article in June; but at 192 words, *A Message From The Editor* on page 1 was simply "too small" to be counted).

A Skeleton In My Closet (Part 2 of 2) on page 3 of our July 2012 issue was number 94, *Foreign Imports (Part 1 of 2)* on page 4 of our August 2012 issue (about the surprising number of actions I have to perform in order to import articles written by *other*

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people into our newsletter) was number 95, and *Foreign Imports (Part 2 of 2)* on page 3 of our September 2012 issue was number 96. Now we come to the October 2012 issue (our annual "Halloween Episode"). There, I wrote 3 articles. At 204 words and 1 image, *Happy Halloween!* on page 1 was judged "too small" to be counted. At 542 words and 1 image, *An Evil Update* on page 3 (about an Ubuntu "update" that had unanticipated, annoying, and somewhat sinister consequences) was number 97. Then, at 323 words and **4** images, *Mark of the Gremlins* (which began at the bottom of page 3, and chronicled the unexpected degradation of ACGNJ newsletter logos over the years) was counted as number 98. (It was judged to be "a bit on the small side", but *not* small enough to be disqualified).

Logo Mania, on page 3 of our November 2012 issue, was an updated survey of anything anybody could *EVER* want to know about our various ACGNJ logos. At 2,022 words and **15** images, it moved us nicely back into the normal word range for my

articles, and was awarded the number 99. That brings us to our December 2012 issue. There, I had two articles. First, there was *Happy Holidays!* on page 1. At 86 words and 1 image, it was just “too small”. Then there was *Why So Big?* on page 3. It was 4,283 words long, with no images, and it turned out to be the first of *ten* installments in what became my 30,819 word “bigness” saga. What's more, it received the coveted number 100! How about that. It took me just over 7 ½ years to write and publish 100 newsletter articles. (The initial impetus for the whole “bigness” saga came from the undeniable fact that our original October (6.3 MB), November (5.9 MB) and December (4.8 MB) 2012 newsletters (done on a borrowed Vista laptop while I was in the hospital) came out *SO* much bigger than anything that I'd made under Linux).

Son of “Why So Big?” (number 101) was in our January 2013 issue, and *Daughter of “Why So Big?”* (number 102) was in our February 2013 issue. *Purloined Letters* (number 103) was in our March 2013 issue. There, I took a break from “bigness” to

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July 2013 issue, *Uncle of “Why So Big?”* (number 108) was in our August 2013 issue, *Cousin of “Why So Big?”* (number 109) was in our September 2013 issue, and *The Ghost of “Why So Big?”* (number 110) was in our October 2013 issue. (I had two other articles in October. At 105 words, *ACGNJ Planning Meeting Mini-Report* was both “more edited than authored” *and* “too small”; and at 76 words, *Which Witch Is Which?* was just “too small”). *Thanks For “Why So Big?”* (number 111) was in our November 2013 issue. Now, as the proud author, I'd like to say that you should read all 10 articles in my “bigness” saga; but I have to admit that *Thanks For “Why So Big?”* contains summaries of the 9 previous installments. So you *can* get away with reading just that one article.

Note that last year, with our December 2012 newsletter, I passed *two* anniversaries at once (100th article and 1st year as Editor) without commenting about *either one* of them. Now, with this article, I'm celebrating my Second Anniversary as Editor and my 112th article; but what can I really say? I *can't*

examine a *different* problem that had occurred in our October through December 2012 newsletters: Each of them also contained “*serious* technical flaws”. In *Purloined Letters*, I displayed examples of those flaws (disappearing or changing letters from the Times New Roman Bold font set), and I advanced a theory as to their cause. (I blamed it all on Vista). *Revenge of the 13 Things* (number 104) was in our April 2013 issue. There, I complained about recent changes made to Ubuntu, and laid out two possible courses of action to avoid those changes. The first didn't work, but the second *did*. Now, I'll be able to use my Ubuntu system until April of 2015. If the Ubuntu developers haven't come to their senses by then, I'll have to find a new Linux distribution for my own personal use.

With *Niece of “Why So Big?”* (number 105) in our May 2013 issue, I resumed the “bigness” saga. *Nephew of “Why So Big?”* (number 106) was in our June 2013 issue. (I also wrote a Mini-Editorial in June; but at 36 words, it was *definitely* “too small”). *Aunt of “Why So Big?”* (number 107) was in our

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comment about the quality of my work. (Only you, as readers, can judge that). Fortunately, due to a recent e-mail exchange, I've been reminded that there *is* something I can write about. Here's what happened: ACGNJ President Mike Redlich wrote; “I thought the end of the month (or close to it) was the deadline”. Well, that used to be true. While Barbara DeGroot was Editor, the newsletter deadline was the 25th of the month. However, one of the first changes I made when I took over as Editor was to move that deadline to the 15th of each month. As I explained in my reply; “After SEVENTEEN years as editor, Barbara got to the point where she could bang out a newsletter in just a few days. I'm not anywhere near there yet”.

Later on, it occurred to me that I actually had some personal data that I could use to further explain my reply. In *Purloined Letters* (in our March 2013 newsletter), on page 4, in the lower right hand column, I wrote; “*I was, in fact, working on the January 2013 issue when my borrowed laptop crashed; and it crashed so thoroughly that it was*

beyond my power to fix it. (At least while I was in a convalescent facility, anyway). Eventually, with Glen (my brother) providing transport, I was able to make two 'day trips' home to my Linux computers. There, I recreated my aborted January issue from scratch. (All I had to guide me was a test PDF of my first four original pages). In total, it took me fourteen hours to do it”.

Luckily, I'd backed up that test PDF on a USB memory stick, so it wasn't lost when the laptop crashed. Now, I went back to the JANMAR13 directory, and looked it up. It was named 2013Jan-Exp2.pdf, so it was my **second** experimental PDF for the January issue; but it was the first to have completed versions of pages 3 and 4 in it. That was very fortunate, because apparently I hadn't bothered to back up **any** of my source files for the January issue. (Double and even **triple** shame on me). Let's go page by page, and see how narrowly I avoided disaster.

Basically, other than “In This Issue” (the table of contents), January's page 1 had three sections:

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pages had been laid out).

There were three sections on page 3. *ACGNJ Announcements* required two ODT source files, one for the Main Meeting, and one for the Window Pains Meeting. *President's Note* by Mike Redlich required an ODT file, and *ACGNJ Internet History* by John Raff (which took up the bottom of page 3 and **all** of page 4) required an ODT file, too. The four existing versions of those files in the JANMAR13 directory are all dated **later** than that test PDF file. This means that I used Okular to re-create all four of **them**, too. So I recovered **absolutely everything** on those first four pages that had been newly created for our January issue from that one test PDF. If I hadn't copied it into that USB stick, all would have been lost.

Now we come to my own article, *Son Of “Why So Big?”*. Because my e-mail client is located on the Internet rather than on my computer, I **didn't** lose any of my old e-mails when the laptop died; and because I always send e-mail copies of my articles to my brother Glen (he's my proof reader), it was fairly

ACGNJ Meetings, 2012 Election Report, and Election Results. Each of those three required an ODT (**O**pen **D**ocument **T**ext) source file; and each existing version of those files in the JANMAR13 directory is dated **later** than that test PDF file. This means that I used Okular (the more versatile of my two Linux PDF readers) to copy the relevant text out of that PDF file and into three empty ODT files. Then, after properly re-formatting each ODT file (using LibreOffice, my main word processor), I imported their contents into the corresponding sections in a new Scribus work file.

Page 2 is a “boilerplate” page, and usually **doesn't** have to be changed; but this was the January issue. So “Officers, Directors and Leaders” at the top of the page had to be updated with the names of the newly elected club officials, and “Copyright © 2012” in the bottom left hand column had to be changed to “Copyright © 2013”. I typed in all of those changes manually, using the built-in Scribus Story Editor. (I also edited “In This Issue” on page 1 using Story Editor, but only **after** all of the other

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easy to re-send a copy of my article back to myself. From my previous work on the now-lost original version, I still remembered that *Son Of “Why So Big?”* had consumed six pages. That took care of pages 5 through 10. I also remembered that *Have Fun and Learn with PAINT* by Jim Cerny (from the Sarasota PCUG in Florida) had taken up two pages. (In point of fact, **that size** was the reason why I chose that specific article in the first place). So I went to my Sources subdirectory and extracted another copy from the appropriate ZIP archive. That took care of pages 11 and 12.

However, if you look closely at those two articles in my re-made newsletter, you'll see that a little bit of extra white space has been added to the top of every column of text on pages 5 through 11 (but **not** 12), and to the bottom of most of those columns as well. This is because *Have Fun and Learn with PAINT* came up a tiny bit short, and *Son Of “Why So Big?”* was actually **quite** a bit short. Adding that extra white space let me “stretch out” both articles until they nicely filled up their assigned pages. Pages 13

through 16 were “boilerplate” pages, and *didn't* need to be updated right then, so that was it. (Of course, that's an understatement. I'm sure you realize that a lot of small tweaks and adjustments were still required; but you get the general idea).

What you may not realize is that although the above actions took me fourteen hours (eight on the first day, six on the second), with bathroom breaks and occasional snacks as I worked (but *no* meal breaks), this was actually the *EASY* part. Some of it was tedious, but all of it was relatively straightforward. Furthermore, *everything* I've described here has to be done every single month for every single newsletter. If anything, creating a normal newsletter is more difficult, because my information comes from a lot of places, not mostly from a single PDF file. Really, the only unique thing about this particular experience is that I was able to accurately measure the time it took me to do it. (As I said above, I've got *data*).

So, if that was the easy part, what's the hard part? Well, separating what *won't* fit from what *will* fit,

and then figuring out what you're going to put where. In addition to giving me the text, that test PDF had also given me the exact position on those four pages for every single word. (And my then still fresh memory had given me that information for those last two articles). Usually, for a regular newsletter, working this out requires trial and error, and can gobble up *a lot* of time. Hopefully, I'll get better at it as I gain more experience. For now, let's just say that I really, really *need* those extra ten days that moving the deadline gave me.

Well, that wraps up my 112th article (this one) as writer, and my Second Anniversary as Newsletter Editor. During those two years, due to *four* operations on my feet, I turned in quite a few late issues. Most were just a *little bit* late, but several were *VERY* late. Also, I had to completely *cancel* our 38th Anniversary Newsletter Collection CD. (Making do with our 37th Anniversary CD for a second year instead). Hopefully, I'll do better next year. Anyway:

See you next month. ☐

CD-R and DVD+–R Longevity: How Long Will They Last?

John Langill, Newsletter Editor, Southern Tier Personal Computing Club, NY

Newsletter: Rare Bits, jlangill1 (at) stny.rr.com

Although there are today many data storage alternatives, I'm sure that there are many such as me who in the past stored various kinds of information on optical media, CD-Rs in particular. To cite just two examples; I have scanned hundreds of family slides, organized the digital images, and saved them on CD-Rs. Similarly, I did the same with several hundred of digital photos from my two-month visit with my son and daughter-in-law in Australia in 2003. The purpose of doing so was to have a convenient form in which archive the digital images and to share them with other members of the family; while at the same time conserving space on the hard-disk—then a more precious commodity than it is today.

Thinking back 10 or more years, one may recall that a single CD-R then offered a relatively large data storage capacity in a form that could be easily and inexpensively mailed anywhere in the world—something that could not be accomplished via the Internet or with other “portable” media at the

time.

While acknowledging that the images stored on these CD-Rs—and others even older—could now be transcribed to another medium, I confess that I'm reluctant to devote the time and effort to doing so at this point. Accordingly, the durability and life-expectancy of the CD-Rs that I created 10, 20, and even 30 years ago, has become an increasing concern.

In the early '90s when the first CD-R discs were introduced manufacturers said the media had a data life in excess of 40 years. In the late '90s when the first DVD-R discs appeared on the scene producers proclaimed a data life of at least 100 years. However, in the time since their introduction it has been discovered that these early discs are susceptible to media “rot” (i.e., “bit rot”) that can eat your information—audio, video, or data—in as little as two years after it is written. (According to research fairly recently conducted by J. Perdereau, CD-Rs

may have an average life expectancy of not more than 10 years—Journal de 20 Heures, March 2008.)

Because CD-R and DVD+–R media is used to archive nearly everything today, it does make one worry; especially if these discs are the only repository in which your precious, and irreplaceable, family memories—photos and movies—as well as vital family, personal, and company data/documents are stored.

So where does the truth lie? Somewhere across the complete spectrum.

Most people who successfully burn a disc believe they have quality media. Unfortunately that only tells you the disc will be compatible (able to be played) in the vast majority of CD or DVD players. More importantly all better quality CD and DVD burners include technology called over burn/under burn protection making “coaster production” a thing of the past. The basic construction of both disc technologies enable you to burn your data in a very precise, very controlled manner.

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and store the media. However, even assuming proper handling, temperature and humidity can adversely affect the data-life of even quality media. Between the CD-R discs produced in the early 1980s and today’s double-layer DVD+–R discs there has been considerable progress in write performance, capacity, quality, and cost.

Following the test procedures of the International Standards Organization (ISO), quality media manufacturers have been able to predict data-life spans ranging from 50-200 years. But keep in mind there are wide differences between low-budget media manufacturers and quality media manufacturers. In addition variations in manufacturing methods, materials and processes/procedures can dramatically affect the data life of the media you use.

Or as auto manufacturers like to say... “Your mileage may vary.”

Understanding Your Discs

It isn’t vital that you understand the construction of CD-R or DVD+–R media to produce a quality disc that can be read years from now any more than you need to understand the internal combustion engine to drive a car. But understanding the difference

Test Options

There are only two foolproof ways of proving the data life of the discs you use:

1. Write a few CD-Rs or DVD+–Rs, then wait about 25-50 years and check if they still hold the correct data.
2. Use a CD/DVD analyzer that is specially designed to retrieve very accurate information about your media and your data after accelerated aging in test chambers where the discs are subjected to excessive temperature and humidity tests.

The first is typically impractical. Nonetheless, from personal experience I can attest to the fact that the first CD-R I ever burned—selections from a vinyl LP album—plays just fine and the music still sounds great 25 years later. However, I have also had some CD-Rs become unplayable in just a matter of months. Fortunately, such occurrences have been few.

The second provides only theoretical limits and doesn’t take into consideration how you use, handle,

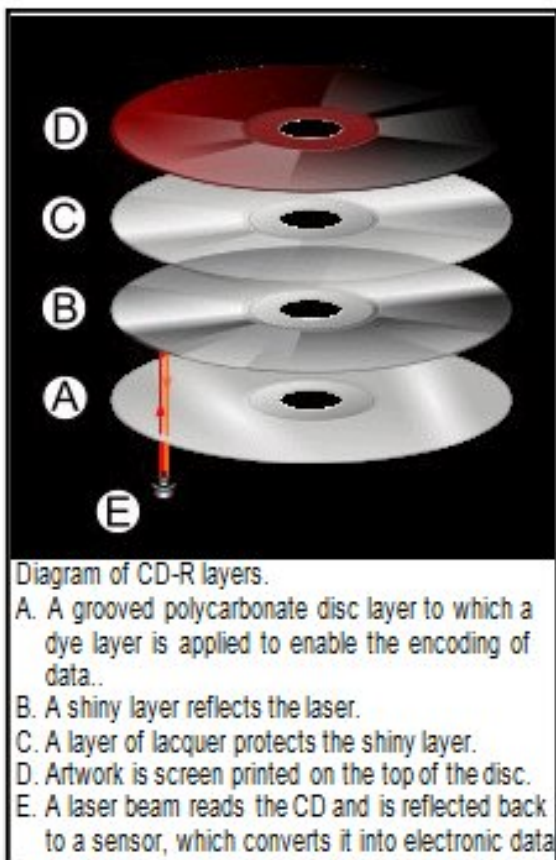
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between quality and cheap media may help you avoid losing family photos or videos later on.

Most people consider DVD+–R discs little more than overgrown CD-Rs but, while they are similar, they are also quite different. In particular, the grooves are narrower and more closely spaced and the structure (pattern) of “pits” and “lands” is very much smaller with a DVD+–R in order to enable a greater data storage capacity. Precision is very critical.

Writable CD-R and DVD+–R discs start with a piece of polycarbonate substrate into which very precise grooves are molded to guide the tracking of the laser beam. A dye layer is then precisely applied to the substrate followed by a reflective layer and one or more protective layers. A few of the leading media manufacturers have initiated the policy of applying two very resistant layers for added data protection when the discs are used, handled, and stored.

Because of the faster read/write performance users now expect, leading manufacturers have developed new stamper technology for optimum groove (storage area) shape and ultra-precise molding technology. The molding is critical when the media



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CD and DVD rot (i.e., bit rot) is not the problem today that it was with earlier LaserDiscs because the media use different dye technologies to store data and make it much less susceptible to that kind of degradation. The truth is that deterioration arising from delamination and oxidation is the greater problem.

Delamination and oxidation usually occur at the outer edge of the disc and are often the result of the adhesive not being properly applied and cured during the production process. This usually happens when price-oriented manufacturers use equipment that is 2 to 3 generations old and the least expensive materials possible.

When it does happen the laser is unable to read the data on the reflected layer. It is usually caused by:
Oxidation when air comes in contact with the reflective layer

Galvanic reaction between the layers and coatings

Chemical reaction caused by impurities in the disc's adhesive or aluminum coating.

Excessive heat and humidity are known to accelerate and exacerbate delamination and oxidation.

must withstand being rotated at extremely high speeds during the write process—up to 52x for CD-Rs, and 8x to 16x for DVD+Rs. The engineering margin that was once reserved for manufacturing tolerance has been used for data capacity instead, leaving no tolerance for manufacturing; for these discs to be truly compliant with the Orange Book standard, the manufacturing process must be perfect.

Media Problems

The quality of your media is directly related with the time the media will last without losing information. As you can see there are a number of areas where manufacturers can shave a few cents in the overall cost of the media and areas where production can go amiss to dramatically shorten the data life of your stored information.

There are conflicting claims and consumer beliefs on which media is best for data retention of 30, 50, 100 years—green, gold, or blue dye; and gold or silver reflective layer. It is somewhat immaterial today. Manufacturers of quality writable discs have developed significantly improved, more sensitive and more stable dyes, and better reflective materials that virtually eliminate data loss during high-speed read/write processes and enhance long-term reliability.

The Real Culprit

If you have purchased quality media from a quality manufacturer, you are still not assured of 50-100 years of data life! The greatest danger to the data longevity of your personal, family, and business information is you alone; that is, by the way you handle and store your discs. The environment—temperature and humidity—can stress the materials. Gravity also can bend and stress the discs. Fingerprints and smudges can do more damage than scratches.

But by following a few Do's and Don'ts you can ensure your precious family and friend pictures, movies, family records, and business files have the maximum data life.

Do not

Touch the surface of the disc.

Bend the disc... especially when removing it from its case as this can cause a fine crack to develop at the rim of the hub-hole which will render the disk useless. This is a particular problem with DVDs.

Store discs horizontally for a long time (years).

Open a recordable optical disc package if you are

not ready to record.
Expose discs to extreme heat or high humidity.
Expose discs to rapid temperature or humidity changes.
Expose recordable discs to prolonged sunlight or other sources of UV light.
Write or mark in the data area of the disc (the shiny side that the laser “reads”).
Clean in a circular direction around the disc.
Do
Handle discs by the outer edge or the center hole.
Use a nonsolvent-based felt-tip permanent marker to mark the label side of the disc.
Keep dirt or other foreign matter from the disc.
Store discs upright (book style) in original jewel cases that are specified for CDs and DVDs.
Return discs to their jewel cases immediately after use. Because the label side is more delicate and susceptible to damage, I recommend storing any CD or DVD disc label-side down in its jewel case.
Leave discs in their spindle or jewel case to minimize the effects of environmental changes.

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you are backing up mission-critical data on your home or business computer, quality matters. Then it is important to select a brand of media that will keep your data safe, secure and available for years to come.

Quality and low prices just don't seem to mix!

Remove protective wrap only when you are ready to record data on the disc.

Store in a cool, dry, dark environment in which the air is clean—relative humidity should be in the range 20% - 50% (RH) and temperature should be in the range 4°C - 20°C (approx. 40 to 70°F).

Remove dirt, foreign material, fingerprints, smudges, and liquids by wiping with a clean cotton fabric in a straight line from the center of the disc toward the outer edge.

Dampen the cloth with a lens cleaner to clean your discs. Dry with photo lens tissue. For tough problems use Windex or a similar glass cleaner, diluted dish detergent, or rubbing alcohol. Rinse and dry thoroughly with a lint-free cloth.

Check the disc surface BEFORE recording.

Reliable Medium

There is a lot of cheap CD-R and DVD+R media that has marginal quality. For some applications like games, quality isn't critical. For irreplaceable, vital data like family photos, special events, vacations, and family/friends memories quality does matter. If

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The next step to long-term data reliability is to handle and store the media with the respect your data deserves.

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The Web of Unintended Consequences

Greg Skalka, President, Under the Computer Hood User Group, CA

Newsletter: Drive Light (www.uchug.org) president (at) uchug.org



For all those new high school graduates out there, the World Wide Web has been around all of their lives. Even most new college grads have never known a time without the web. Though the Internet, a global computer network, has existed since the 1960s, the World Wide Web has existed publicly for only 20 years. Tim Berners-Lee, then an employee of the European nuclear research organization CERN, created the framework for linked information in 1989; it went into the public domain on April 30, 1993. Berners-Lee hosted the first website on a NeXT computer with the intent to allow physicists around the world to share information. To commemorate the anniversary, CERN has resurrected that first web page, which explained the basics of the web and how to

use it. (See:

<http://info.cern.ch/hypertext/WWW/TheProject.html>).

I wonder if Tim Berners-Lee could have anticipated the impact the web has had on life today. While he no doubt intended it to be a space to exchange information, fostering creativity and collaboration, the fact that it has become so much more has me considering the unintended consequences of his creation. What do we now have, 20 years later, as a result of that first web page, and what price have we paid?

Whole industries have been created and fortunes made (and lost) in servicing the web. Our lives have been made easier, and the world has been made a smaller and more interconnected place by the resources available to anyone on the planet (and even on the International Space Station) from the World Wide Web. Though there are great global benefits in the free exchange of information it provides (at least in most countries), even helping to topple repressive governments, some would argue there are also detrimental consequences to its spread. The web has made good and useful information freely available to anyone with Internet access, but it has also allowed those with bad ideas, racist attitudes and radical goals to put their views and information before a worldwide audience. As with any new environment, it didn't take long for criminal activity



to find it, and for governments to look at it as a new battlefield.

The World Wide Web could be thought of as an application running on the Internet, and while it is not the only Internet service typically in use today, it enables or enhances the use of most others. Although email and streaming media don't require the web, most people access them through it. It is hard to imagine social media and web commerce without the web.

A great deal of new wealth has come into the world

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as a result of the web, not even counting that from ecommerce. The web provided a primary reason for personal computer use and fueled the expansion of the fledgling personal computer industry.

Without the web, there would have been no "browser wars", and all those Netscape employees would have been without jobs. Today most computer users would cringe at having to use dial-up Internet access; the need for web connection has driven a worldwide broadband infrastructure expansion. New telecom technologies have been developed and the companies that promoted them have prospered as a result of this demand for web access, especially mobile access. Our own San Diego economy has benefited greatly from this infrastructure build-out driven by the need for improved web connections. Qualcomm pioneered new cell phone technologies that now carry more data than voice traffic, and have developed new processors that power smartphones. ViaSat in Carlsbad is planning to develop and launch their second satellite to help provide cheaper broadband satellite service to areas of North America

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not served by wired broadband. All that economic development and the related benefits (like jobs) that it provides are the result of Berners-Lee's development twenty years ago.

The popularity of mobile computing, using laptops, netbooks, smartphones and tablets, came out of the use of the web. What would be the point of having a tablet or smartphone, devices primarily oriented towards consumption of content, if the World Wide Web were not there to provide that content? Devices like the Chromebook, which are pretty much useless without web access, and concepts like cloud storage exist only because of the web. Big technology companies like Apple, Intel and Microsoft owe a lot of their success to the existence of the web.

Google, of course, is the best example of economic success driven by the web, as a search engine is unnecessary if there is no web to search. The concept of making money from web advertising was another unintended consequence of the web's development.

E-commerce was probably unanticipated by Berners-Lee, yet it has grown into a significant economic

factor worldwide. The ability to easily comparison shop products from all over the globe is definitely a great benefit, one that has become so popular that it is sometimes blamed for the demise of traditional “brick and mortar” stores. Today’s political battles over taxes on Internet sales would not be happening were it not for e-commerce on the web. So many personal and financial tasks can now be more easily performed on the web, including paying bills, registering to vote, booking travel and applying for college. Web banking has revolutionized personal finance and the banking industry, providing greater competition in the industry (including web-only banks), but no doubt costing jobs in local branches.

Without the web, there would be no YouTube, no Facebook, no Google Maps, no iTunes and no eBay. All these beneficial things owe their existence to the web, yet there are also unintended consequences, many of the quite detrimental to all that information so easily accessible.

Could Berners-Lee have anticipated the growth in Internet porn facilitated by the World Wide Web? Or

how much time people might waste on Facebook? Or how much deception might go on in online dating site profiles? Or how much productivity is lost by employers each year on Cyber Monday, the Monday after Thanksgiving, when employees are lured by marketers into shopping online from work? Cybercrime, cyber bullying, cyber-attacks; these are all unintended consequences of having the World Wide Web. Unfortunately, along with the benefit of web page links that take you to the information you want are corrupted links that hijack your browser and take you to undesirable sites, or facilitate the loading of malware on your computer. With useful web access also come denial of service attacks, where groups or individuals with malicious intent attempt to make web sites unavailable to intended users.

With more and more business and infrastructure information and systems connected to and accessible through the web, the threat of misuse of that information and access becomes greater. Cyber spying by criminals and governments unfriendly to

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our own is costly to businesses, individuals and our country’s economic and military security. There are legitimate concerns about terrorist threats to our infrastructure through cyber attacks. Investigations into recent terrorist acts often lead to web sites where groups hostile to our country and our way of life promote their views, recruit members and provide how-to information on bomb making and other terrorist tactics.

The cyber threat is so significant that our own military has a specific branch devoted to cyber security and warfare, the U.S. Cyber Command. Our adversaries are increasing their hostile cyber activities, requiring us to fund a growing cyber capability for our defense in that arena.

On a personal front, the presence of the web has had unintended consequences for my finances. In addition to all the personal financial benefits I’ve received from the web, there are added costs as well. All that connectivity comes at a price. For me that cost is around \$100 a month, for cable Internet access at home and smartphone data plan expenses

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for family members. My own personal security costs add up as well. While viruses and malware can be spread through removable media and emails, a lot of the threat comes from the web. Would I need to have so many antivirus and anti-malware programs if the web didn’t exist? Would I need to go to such great lengths to keep track of hundreds of unique and complex passwords to protect my financial and personal information in all my web-based accounts? Would I need to worry about doing everything right in terms of cyber security but still having my identity stolen by criminals that hacked the web site of a careless online merchant I purchased from?

With each anniversary of the World Wide Web, we should be grateful to Tim Berners-Lee for all the benefits the web has brought us. It has profoundly changed our lives and culture, mostly for the good. We must also be aware that almost everything that seems good comes with unintended consequences.

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SIG News

LUNICS (Linux/Unix)

Andreas Meyer (lunics@acgnj.org)
<http://www.acgnj.org/groups/lunics.html>

LUNICS is a group for those who share an interest in Unix and similar operating systems. While we do quite a bit with Linux, we've also been known to discuss Solaris and BSD as well. Recent meetings have followed a Random Access format. See our web page for further information. (We meet on the first Monday of each month, at 8:00 PM). ☐

Main Meeting

Evan Williams (president@acgnj.org)
<http://www.acgnj.org/groups/mainmeet.html>

We meet on the first Friday of the month, at 8:00 PM. Each December, this meeting includes our Annual Business Meeting and Officer Elections. *No* meetings in July or August. ☐

Layman's Forum

Matt Skoda (som359@gmail.com)
<http://www.acgnj.org/groups/laymans.html>

This SIG discusses issues of interest to novice users or those planning to get started in computing. Watch our Web page for updates and announcements. We meet at the same time as the Hardware Workshop. (On the second Monday of the month, at 8:00 PM). *No* meetings in July and August. ☐

Hardware Workshop

Mike Reagan (hardware@acgnj.org)

This group is dedicated to repairing, refurbishing and/or recycling older computers. Ten people attended the first meeting, so there is still a market for this type of event. Although we looked at some of the older equipment stored in the back room, most of our time was spent in talking about past experiences and planning for the future. Hopefully, we can establish a viable long-term schedule of projects, and keep the interest of those who attended this inaugural meeting. If you have a hardware problem, bring it in and we can all help fix or demolish it. (No guarantees either way.) We meet at the same time as the Layman's Forum. (On the second Monday of each month, at 8:00 PM). ☐

Java

Mike Redlich (mike@redlich.net)
<http://www.redlich.net/javasig/javasig.html>

This SIG covers beginner, intermediate, and advanced level Java programming. Primary focus is on developing useful/practical applets and applications. (We meet on the second Tuesday of each month, at 7:30 PM). ☐

Mobile Devices

Brenda Bell (mobdevsig@acgnj.org)

The Mobile Devices SIG focuses largely on current-generation cellphones and smart phones (such as Blackberry, Android, iPhone) which bridge the gap between basic cell phones and traditional computers, and how they can help you manage and organize your life. Our membership ranges from those who have recently acquired their first, basic cellphone to those who develop applications for today's modern smart phones, iPods, and ultra-portable computers. While we expect to spend much of our time investigating the built-in features and specialized applications available to modern smart phones, if you bring your basic (or multimedia) cell phone, iPod, or other mobile device with questions on how to use it, where to find applications, or what features they have, we are always happy to help! Meet and greet and plan where this event goes. Bring all your ideas, PDAs, fancy phones, etc. (We meet on the second Wednesday of alternate months (we get the even ones), at 7:30PM). ☐

WebDev

Evan Williams (webdev@acgnj.org)

This SIG is an open forum for all Website Development techniques and technologies, to encourage study and development of web sites of all kinds. All languages will be considered and examined. The current project is a CMS for the club. Anyone interested in starting a new project, come to the meeting and announce/explain. Provide as much detail as possible. WebDev should be an all-encompassing development and examination forum for all issues, applications, OS, languages and systems one can use to build Websites. We currently

have two web development language SIGs: .NET and Java; but other languages and OS need to be investigated, examined and tested; Windows, Linux, UNIX, DEC, Vax, HP etc. Intel-PC, Motorola - MAC etc. (We meet on the second Wednesday of alternate months (we get the odd ones), at 7:30 PM). ☞

Investment Software

Jim Cooper (jim@thecoopers.org)

http://www.acgnj.org/groups/sig_investment.html

The Investment SIG continues with presentations on how to use analysis programs TC2000 and TCNet. Large charts are presented on our pull down screen and illustrate the application of computer scans and formulas to find stocks for profitable investments. Technical analysis determines buy points, sell points and projected moves. Technical analysis can also be used on fundamentals such as earnings, sales growth, etc. We're no longer focusing on just Telechart. If you are using (or interested in) Tradestation, eSignal, VectorVest, or just in learning how to select and use charting and technical analysis, come join us!! (We meet on the second Thursday of the month, at 8 PM). ☞

NJ Gamers

Gregg McCarthy (greggmajestic@gmail.com)

<http://www.NJGamers.com>

www.lanparty.com

The Friday Night Frag starts at 6:00 PM on the second Friday of each month, and keeps going until 12 Noon on Saturday - 18 hours for 5 bucks!

BYOC - Bring your own computer.

BYOF - Bring your own food.

And if you don't like sitting on metal folding chairs...

BYO chair! ☞

Web Browser (Formerly Firefox)

David McRitchie (firefox@acgnj.org).

This SIG is an open forum for all Firefox and Mozilla techniques and technologies, to encourage study and development of web sites of all kinds. All browsers will be considered and examined. All members and guests are invited to check out the design concepts and voice their opinion. (We meet on the third Monday of each month, at 7:30 PM). ☞

C/C++ Programming

Bruce Arnold (barnold@ieee.org)

<http://acgnj.barnold.us/index.html>

This is a forum for discussion of programming in general, beginning and intermediate level C, C++, C-Win programming, hardware, algorithms, and operating systems. We demonstrate real programming in a non-intimidating way, presenting complete code for working programs in 3-5 sheets of paper. (We meet on the third Tuesday of each month, at 7:30 PM). **No** meetings in July or August. ☞

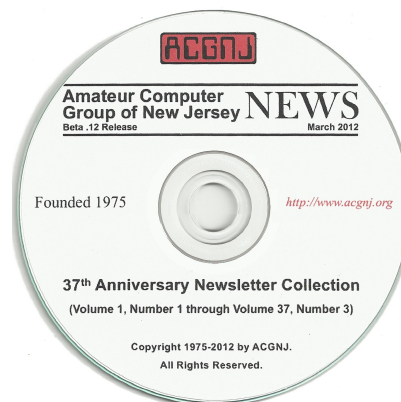
Window Pains

John Raff (jraff@comcast.net)

<http://www.acgnj.org/groups/winpains.html>

Intended to provide members with Windows oriented discussions, Microsoft and Linux style. Directed to more technological level of attendee, but newbies are welcomed. (We meet on the third Friday of the month at 8:00 PM). **No** meetings in July or August. ☞

37th Anniversary Newsletter CD Now On Sale



Beta .12 Release.

\$8.00, including postage.

(\$7.00 if you pick up a copy at a meeting).

Get yours today!

Back Issues Still Needed

Our collection remains incomplete. Below is a list of missing newsletters. Anyone who lends us one of these (or supplies a good clear copy) will receive the next CD as our thanks.

1975: #2 and #3 (dates uncertain).

1976: January.

1984: August.

1985: June, July, August, September. ☞

Guru Corner

If you need help with any of the technologies listed below, you can call on the person listed. Please be considerate and call before 10 PM.

Software

HTML	Mike Redlich	908-246-0410
	Jo-Anne Head	908-769-7385
ColdFusion	Jo-Anne Head	908-769-7385
CSS	Frank Warren	908-756-1681
	Jo-Anne Head	908-769-7385
Java	Mike Redlich	908-246-0410
C++	Bruce Arnold	908-735-7898
	Mike Redlich	908-246-0410
ASP	Mike Redlich	908-246-0410
Perl	John Raff	973-560-9070
	Frank Warren	908-756-1681
XML	Mike Redlich	908-246-0410
Genealogy	Frank Warren	908-756-1681
Home Automation	Frank Warren	908-756-1681

Operating Systems

Windows 3.1	Ted Martin	732-636-1942
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ACGNJ T-Shirts For Sale



(Front)



(Back)

L, XL: \$15.00

M: 2 for \$15.00

bob.hawes (at) acgnj.org

ACGNJ MEMBERSHIP APPLICATION

Sign up online at www.acgnj.org/membershipApplication.html and pay dues with PayPal.

US/CANADA		Dues	STUDENT	SENIOR CITIZEN (Over 65)
1 Year	\$25		\$20	\$20
2 Years	\$40			
3 Years	\$55			\$45

Mail this application and your check to:
 AMATEUR COMPUTER GROUP OF NEW JERSEY, INC., P.O. BOX 135, SCOTCH PLAINS, NJ 07076

☐ New Member ☐ Renewal ☐ Address Change

First Name _____ Last Name _____ Phone _____

Mailing Address _____ E-Mail _____

City _____ State _____ Zip _____ URL _____

What topics would you like to see covered at club meetings? _____

Other Local Computer Groups		
Princeton Macintosh User Group: 7:15 pm 2nd Tuesday, Jadwin Hall, A-10, Washington Rd, Princeton, (609) 252-1163, www.pmug-nj.org	Linux Users Group in Princeton: 7 pm, 2nd Wednesday, Lawrence Branch Mercer Library, Rt#1 & Darrah Lane, Lawrence NJ http://www.lugip.org	New York PC: 3rd Thurs, 7 pm, PS 41, 116 W 11th St. For info call hotline, (212) 533-NYPC, http://www.nypc.org
Computer Education Society of Philadelphia: Meetings & Workshops at Jem Electronics, 6622 Castor Ave, Philadelphia PA. www.cesop.org/	Brookdale Computer Users Group: 7 pm, 3rd Friday, Brookdale Community College, Bldg MAS Rm 100, Lincroft NJ. (732)-739-9633. www.bcug.com	NJ Macintosh User Group: 8 pm, 3rd Tuesday, Allwood Branch Library, Lyall Rd, Clifton NJ. (201) 893-5274 http://www.njmug.org
PC User Group of So. Jersey: 2nd Mon., 7 pm, Trinity Presb. Church, 499 Rt 70 E, Cherry Hill, NJ. L. Horn, (856) 983-5360	Hunterdon Computer Club: 8:30 am, 3rd Sat, Hunterdon Medical Center, Rt 31, Flemington NJ. www.hunterdoncomputerclub.org , (908) 995-4042.	NY Amateur Computer Group: 2nd Thurs, 7 pm, Rm 806 Silver Bldg, NYU, 32 Waverly Pl, NYC. http://www.nyacc.org
Morris Micro Computer Club: 7 pm 2nd Thurs., Morris County Library, Hanover Ave, Morristown NJ, (973) 267-0871. http://www.morrismicro.com	Central Jersey Computer Club: 8 pm, 4th Friday, Rm 74, Armstrong Hall, College of NJ. Rich Williams, (609) 466-0909.	NJ PC User Group: 2nd Thurs, Monroe Rm at Wyckoff Public Library, 7 pm. Maureen Shannon, (201) 853-7432, www.njpcug.org
Philadelphia Area Computer Society: 3rd Sat, 12 noon Main Meeting, groups 8 am-3 pm. Upper Moreland Middle School, Hatboro PA. (215) 764-6338. www.pacsnet.org	NJ Computer Club: 6:15 pm, 2nd Wednesday except Jul & Aug, North Branch Reformed Church, 203 Rt 28, Bridgewater NJ. http://www.njcc.org	Princeton PC Users Group: 2nd Monday, Lawrenceville Library, Alt Rt 1 & Darrah Lane, Lawrenceville, Paul Kurivchack (908) 218-0778, http://www.ppcug-nj.org

Classified

FREE TO MEMBERS. Use our classified ads to sell off your surplus computer stuff. Send copy to Classified, ACGNJ NEWS, P.O. Box 135, Scotch Plains NJ 07076 or e-mail to the editor, bdegroot@ptd.net. Classified ads are free to members, one per issue. Non-members pay \$10. Send check payable to ACGNJ Inc. with copy. Reasonable length, please.



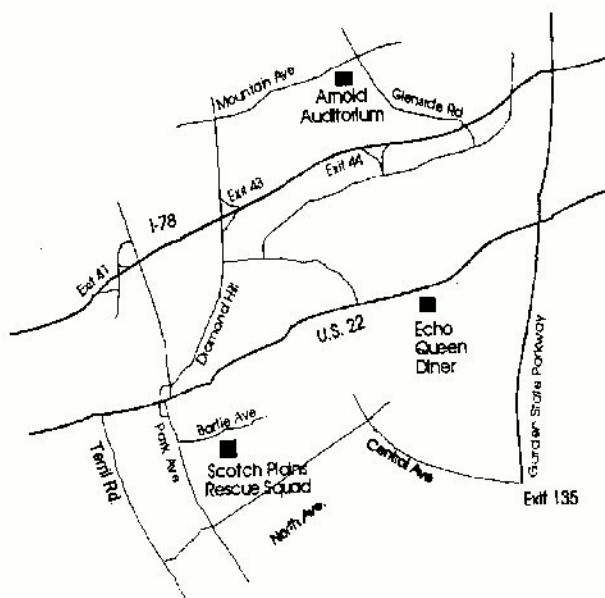
Radio and TV Programs

Computer Radio Show, WBAI 99.5 FM, NY, Wed. 8-9 p.m.

Software Review, The Learning Channel, Saturday 10-10:30 p.m.

On Computers, WCTC 1450 AM, New Brunswick, Sunday 1-4 p.m. To ask questions call (800) 677-0874.

PC Talk, Sunday from 8 p.m. to 10 p.m., 1210 AM Philadelphia. 1-800-876-WPEN



Directions to Meetings at Scotch Plains Rescue Squad, 1916 Bartle Ave., Scotch Plains NJ

From New York City or Northern New Jersey

Take Route 1&9 or the Garden State Parkway to US 22 Westbound.

From Southern New Jersey

Take Parkway north to Exit 135 (Clark). Stay on left of ramp, follow circle under Parkway. Bear right to Central Avenue; follow to Westfield and under RR overpass. Left at light to North Avenue; follow to light in Fanwood. Right on Martine (which becomes Park Ave). Right on Bartle Ave in middle of shopping district. Scotch Plains Rescue Squad (2-story brick) is located on the right. Do not park in the row next to the building — you'll be towed.

From I-78 (either direction)

Take exit 41 (Scotch Plains); follow signs to US 22. Turn right at light at bottom of hill and use overpass to cross Rt. 22. Follow US 22 Westbound directions.

From US 22 Westbound

Exit at Park Avenue, Scotch Plains after McDonalds on the right, diagonally opposite Scotchwood Diner on the left, immediately before the overpass. After exiting, turn left at the light and use overpass to cross US 22. Bear right at bottom of ramp to continue south on Park Avenue. Turn left at the second light (a staggered intersection). Scotch Plains Rescue Squad (2-story brick) is on the right. Do not park in the row next to the building — you'll be towed. We meet on the second floor, entering by the door at the right front of the building.

From Western New Jersey

Take US 22 Eastbound to the Park Avenue exit. The exit is about a mile past Terrill Road and immediately past the overpass. Exit onto Park Avenue South and follow the directions above to the Rescue Squad building. ☐